Amendments to the Specification

Please amend paragraph 0004 as follows:

[0004] An example of this is in the AMI inspection of printed circuit ("PC") boards ("PCBs"). A PCB may, for example, be ~~12~~ twelve or more inches long and mount dozens of components. Typically only a few of the components are inspected— ~~e.g.,~~ integrated circuits ("ICs"), ~~e.g.~~.

Please amend paragraph 0005 as follows:

[0005] The user would typically have access to visualizations of a variety of AMI "slices" taken at various depths in selected inspected components on the PCB. These visualizations often show impedance features of interest within the examined samples, such as die or die lead disbonds, cracks, epoxy underfill voids, and so forth. This is extremely valuable information, but it is uncorrelated with the PCB. The user is plagued by questions such as: Which examined components exhibit which of the visual anomalies? What is the correct spatial orientation of the acoustic visualization relative to the PCB? How does the scale of the visualized sample relate to the scale of the IC or other parts on the PCB?

Please amend paragraph 0014 as follows:

[0014] It is a further object to provide display and visualization methods to enhance the information developed from overlays of images developed from like and/or disparate energy forms and techniques.

Please amend paragraph 0023 as follows:

[0023] FIG. 1 illustrates in highly schematic form a C-Mode scanning acoustic microscope, or "C-SAM", 20 which may be employed to implement the principles of the invention. It is shown as being adapted to inspect an integrated circuit ("IC") package 22 submerged in a coupling medium 24. A pulser 26, under the control of controller 28 excites a transducer 30 to generate a pulsed ultrasonic probe 32, typically at frequencies ranging from 10 MHz or lower to 230 MHz

or higher. The transducer 30 is scanned in X, Y, and Z coordinates by an X-Y-Z stage 34 through an X-Y-Z stage driver 36 under the control of controller 28.

Please amend paragraph 0026 as follows:

[0026] It is of note that in AMI discussions it is customary to speak or write of "scan planes" or "slices", when in fact a scan may not develop a true plane of interrogated points. FIG. 2 illustrates in highly schematic fashion the manner in which, in practice, a scanned plane can, for example, have an offset. An IC package is shown simplified as comprising a silicon die ~~52~~ 54 encapsulated by an IC epoxy encapsulant ~~54~~ 52. A transducer 56 emits an ultrasonic probe 58 transmitted to the IC package through a couplant such as a body 60 of water. As the acoustic index of epoxy is greater than that of water, the probe focus 64 is displaced toward the transducer 56 and scans a plane 66 within the epoxy encapsulant 52. As the transducer 56 is translated into the region of the die 54, however, the probe focus 64 is displaced closer to the transducer 56 and scans a plane 68 offset from plane 66. Because such deviations from a true plane are typically minor, for convenience it is common parlance to simply refer to a scan plane. That convention has been followed in this application.

Please amend paragraph 0029 as follows:

[0029] Acoustic reflectance signals 67, 68, 70 were stimulated by the transducer at three locations, numbered "1", "2", and "3", respectively. Location "1" was on a bonded lead. The white color in the image reproduction signifies a sound bond between the inspected lead and the encapsulating material. Corresponding acoustic reflectance signal 67 shows a reflection 72 from the front surface of the package. About ~~1~~ one microsecond later, we see a positive polarity reflection 74 from the soundly bonded lead. As the reflection 74 is within the reproduction gate 76, the reflection 74 is rendered in the image 71.

Please amend paragraph 0048 as follows:

[0048] Techniques are well known and commercially employed in AMI to create a 3D

"acoustic solid" of a sample. This process begins by "slicing" the part into as many horizontal sections as desired. Typically ~~10~~ ten slices are adequate for thin samples such as integrated circuits, however, up to ~~200~~ two hundred slices or more can be made on commercially available AMI equipment. Equipment software can be set to divide the part into equal thickness slices. Each slice is then automatically scanned with the focus and gate optimized for each specific slice depth. As in C-Mode scanning, the reflectance signals are gated and peak amplitude values are stored.